

# **FLIGHT REPORT**

NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD SFN 50864(12/2014)

Γ	ENGINES OFF	HOURS		PAGE#	OF		
	22:13:26	3.21		1	3		
Γ	ENGINES ON	DRY ICE RATE	1 GEN	2 GEN			
	19:01:00	0	1.97	0.67			
Γ	TOTAL TIME	DRY ICE (lbs)	EJCTBL (grams)	BIP (grams)			
	03:12:26	0.00	0	30	00		

DATE		DISTRICT	SEED#	PILOT				COPILOT					PURPOSE	R - Rain H - Hail O - Other
June 29,	, 2017	1	2	Dakotah Osborn				Steff	any Ro	oyal	Н	M - Maintenance C - Reconnaissance		
Time	EVENT	LATITUDE	LONGITUDE	CLD BASE	ALTITUDE	UPDRAFT	ТЕМР	PRECIP	DRY ICE	FL <i>A</i> EJC	RES	WINTIP		REMARKS
(HH:MM)	#	(deg)	(deg)	(kft)	(KFT)	(FT/MIN)	(°C)	CODE**	(sec)	EJC	DIP	GEN (#)		
19:01:13		46.17057	-103.3043		2.9					0	0	0	Engines on in	Bowman.
19:11:14		46.21622	-103.3418		6.3					0	0	0		
19:21:15		46.28557	-103.6914		7.0					0	0	0		
19:25:34	1	46.27898	-103.4862	9	7.3	500	5	3		0	0	1	Right burner of	on.
19:33:04		46.23646	-103.6233	9	7.2	600	5	4		0	0	1		
19:43:05		46.23409	-103.5579		7.2					0	0	1		
19:53:07		46.42527	-103.3088		7.2					0	0	1		
20:03:12		46.44710	-103.2355		7.1					0	0	1		
20:13:13		46.40772	-103.2862		7.4					0	0	1		
20:16:44		46.41446	-103.4141	9	7.2	400	5	3		0	0	1		
20:26:46		46.39470	-103.1927		7.2					0	0	1		
20:36:47		46.28667	-103.3194		7.2					0	0	1		
20:46:49		46.27052	-103.7339		7.2					0	0	1		

# \*\*PRECIPITATION INTENSITY

- 0 No Precipitation
- 1 virga only, precip not to ground 2 rain shaft to surface, light
- 3 rain shaft well established, but can be seen through
- 4 heavy rain shaft, cannot be seen through

# MISSION SUMMARY

Launched to cells developing on the north western border of District 1. Once there, favorable inflow was found and we began seeding. Cells continued to develop sporadically across the district; we seeded them for hail and rain enhancement as needed. RTB Bowman.

Burner issue was encountered during the first portion of the flight, but the second half it began working again. RTB Bowman.



# **FLIGHT REPORT**

NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD SFN 50864(12/2014)

ENGINES OFF	HOURS		PAGE #	OF
22:13:26	3.21		2	3
ENGINES ON	DRY ICE RATE	1 GEN	2 GEN	
19:01:00	0	1.97	0.0	67
TOTAL TIME	DRY ICE (lbs)	EJCTBL (grams)	BIP (gram	s)
03:12:26	0.00	0	30	00

DATE		DISTRICT	SEED#	PILOT				COPILOT					PURPOSE	R - Rain H - Hail O - Other		
June 29,	2017	1	2	Dakotah Osborn				Steff	any R	oyal	Н	M - Maintenance C - Reconnaissance				
Time	EVENT	LATITUDE	LONGITUDE	CLD BASE	ALTITUDE	UPDRAFT	ТЕМР	PRECIP	DRY ICE	FL/ EJC	FLARES WIN		- 10   DID			REMARKS
(HH:MM)	#	(deg)	(deg)	(kft)	(KFT)	(FT/MIN)	(°C)	CODE**	(sec)	230	DIF	GEN (#)				
20:56:51		46.19315	-103.7316		7.2					0	0	1				
20:59:41	2	46.27269	-103.7333	9.5	7.2	500	5	3		0	0	2	Left burner or			
21:07:09		46.14298	-103.6636	9.5	7.2	400	5	4		0	0	2				
21:10:37	3	46.24027	-103.6730	9.5	7.1	200	5	3		0	0	1	Left burner of			
21:20:42		46.15661	-103.6133		7.3					0	0	1				
21:21:49		46.18885	-103.6245	9.5	7.2		5	4		0	0	1				
21:24:18	4	46.24172	-103.6196	9.5	7.3	400	5	4		0	0	2	Left burner or			
21:34:07	5	46.36317	-103.5739	5	7.8	700	5	4		0	1	2	BIP lit.			
21:41:59		46.30925	-103.5436	9.5	7.8	500	5	4		0	0	2				
21:43:50	6	46.36501	-103.5109	9.5	7.9	800	5	4		0	1	2	BIP lit.			
21:49:24	7	46.36090	-103.4812	9.5	7.8	800	4	4		0	1	2	BIP lit.			
21:53:26	8	46.21941	-103.4759	9.5	7.6	800	4	4		0	0	1	Right burner of	off.		
21:58:49	9	46.29682	-103.4236	9	7.8	700	5	4		0	1	1	BIP lit.			

# \*\*PRECIPITATION INTENSITY

- 0 No Precipitation
- 1 virga only, precip not to ground 2 rain shaft to surface, light
- 3 rain shaft well established, but can be seen through
- 4 heavy rain shaft, cannot be seen through

# MISSION SUMMARY

Launched to cells developing on the north western border of District 1. Once there, favorable inflow was found and we began seeding. Cells continued to develop sporadically across the district; we seeded them for hail and rain enhancement as needed. RTB Bowman.

Burner issue was encountered during the first portion of the flight, but the second half it began working again. RTB Bowman.



# **FLIGHT REPORT**

NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD SFN 50864(12/2014)

E	NGINES OFF	HOURS		PAGE #	OF	
	22:13:26	3.21		3	3	
E	NGINES ON	DRY ICE RATE	1 GEN	2 GEN		
	19:01:00	0	1.97	0.6	67	
П	TOTAL TIME	DRY ICE (lbs)	EJCTBL (grams)	BIP (grams)		
	03:12:26	0.00	0	30	00	

DATE		DISTRICT	SEED#	PILOT				COPILOT					PURPOSE	R - Rain H - Hail O - Other												
June 29,	2017	1	2	Dakotah Osborn					Steff	any Ro	oyal	Н	M - Maintenance C - Reconnaissance													
Time	EVENT	LATITUDE	LONGITUDE	CLD BASE	ALTITUDE	UPDRAFT	TEMP	PRECIP	DRY ICE	FLARES								CE T	WINTII							REMARKS
(HH:MM)	#	(deg)	(deg)	(kft)	(KFT)	(FT/MIN)	(°C)	CODE**	(sec)	EJC	BIP	GEN (#)	name and a second													
22:03:37	10	46.32916	-103.3816	9	6.6		5	4		0	0	0	Left burner of	f.												
22:13:27		46.17117	-103.3039		2.9					0	0	0	Engines off in	Bowman.												

# \*\*PRECIPITATION INTENSITY

- 0 No Precipitation
- 1 virga only, precip not to ground 2 rain shaft to surface, light
- 3 rain shaft well established, but can be seen through
- 4 heavy rain shaft, cannot be seen through

# MISSION SUMMARY

Launched to cells developing on the north western border of District 1. Once there, favorable inflow was found and we began seeding. Cells continued to develop sporadically across the district; we seeded them for hail and rain enhancement as needed. RTB Bowman.

Burner issue was encountered during the first portion of the flight, but the second half it began working again. RTB Bowman.